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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HOLLOWAY III, EDWIN C

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/799,064

Applicant(s)

BRIDGELALL, RAJ

Examiner

Edwin C. Holloway, III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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EXAMINER'S RESPONSE

1. In response to applicant's amendment filed 8-17-06, all the amendments to the specification and claims have been entered. The examiner has considered the new presentation of claims and applicant's arguments in view of the disclosure and the present state of the prior art. And it is the examiner's opinion that the claims are unpatentable for the reasons set forth in this Office action:

Claim Objections

2. Claim 39 is objected to because of the following informalities: Claim 39 line 2 recites "an RFID receiver," but the claim later refers to both "the RFID transceiver" and "the RFID receiver" Although a transceiver includes a receiver, the claim should be amended to have consistent terminology. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Loosmore (US 5682143) in combination with Werb (US006150921A).

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Loosmore discloses a wireless access point (101) that receives RFID transmission from mobile unit (201) with or without interrogation. See fig. 3, col. 1 and claim 1. Tags can be located by triangulation in col. 9 line 40 - col. 10 line 4, but antenna switch coupled to three or more antennas is not disclosed.

Werb discloses an analogous art tracking system with antenna switch coupled to three or more antennas to selectively connect one of the antennas to an RFID transceiver/receiver to send interrogation from each of the antennas to locate mobile units using triangulation. See col. 4 lines 25-41 and col. 10 lines 12-24. Additional antennas provide more accurate location in col. 3 lines 1-5. Tags chip (transmit) a signal spontaneously at predetermined intervals that is detected by the interrogator (transceiver) in col. 2 lines 15-21 and col. 3 lines 51-59.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in Loosmore the additional antennas, antenna switch and interrogation signals from the antennas for location by triangulation disclosed by Werb for more accurate tag location suggested by Loosmore disclosing location by triangulation.

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5. Claims 1, 3-6, 8-13, and 15-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grego (WO 02/096032) in combination with Kotola (US 6892052) and Strong (US 20030007473A1).

Grego discloses a mobile device (T) with network transceiver Bluetooth transceiver for communicating base station (access point) transceiver BTS and Bluetooth transceiver (BTB). The Bluetooth channel is used when the normal channel is unavailable. This allow traffic diversion. See the abstract and pages 7-8. Grego lacks RFID.

Kotola disclose an access point and mobile device and with network, Bluetooth and RFID transceivers. This allows connection with an access device using RFID. See cols. 1-4. The access point RFID transceiver 110/805 can communicate with RFID tag 215/803 on mobile device 102 to receive predetermined data such as Bluetooth ID or other stored data. The tag may be active to provide increased range and data rate in col. 4 line 61 - col. 5 line 5, but does not expressly disclose the "without interrogation" limitation.

Strong discloses an analogous art system with access points have integrated wireless LAN (802.11, Bluetooth, etc.) and RFID tag interrogators in paragraphs 0041-0048. The integration can also include relatively simple sensors to read RFID beaconing

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tags that periodically transmit datagrams in paragraphs 0178-0179. Interrogation is not required for active beacon tags that periodically transmit. The tag can communicate with multiple interrogators / access points is disclosed in paragraph 0170 and fig. 7. Further, tags may communicate with WLAN access points and LPS access points in fig. 2. Multiple access points with multiple antennas are included in fig. 2 to increase coverage

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in Grego the RFID of Kotola as an alternative or addition to cellular/Bluetooth to allow communication with a mobile terminal and access point using RFID. Alternatively it to have included in Kotola the channel switching based on availability or traffic load disclosed in Kotola for traffic diversion.

Regarding claims 1, 3-7 and 12, it further would have been obvious to have included RFID transceiver in the access point configured to receive predesignated data without interrogating to reduce demand on the transceiver in view of Strong disclosing an access point with sensors to read RFID beaconing tags that periodically transmit datagrams that are relatively simple sensors not requiring interrogation and inherently reduce demand on the RFID transceiver and suggested by the active tags of Kotola integrated with a mobile device. The systems of Strong

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shows multiple access points for increased coverage. Although , Kotola and Grego only show one access point, multiple access point would have been obvious for increased coverage, suggested by the "cellular" network of Grego. The transceivers in each mobile device would obviously have been configured to communicate with the plural access points for communication in covered areas.

Regarding claims 13, 15-18, 23-26, and 28-33, it further would have been obvious to have included mobile transceiver communicating to a first access point and RFID transceiver RFID transceiver configured to communicate to a second access point in view of Strong disclosing multiple access points with overlap for locating and WLAN communication coverage.

Regarding claims 8-11, 19-22 and 27 Strong discloses an system with wireless access point communicating with network transceiver and RFID tags. Multiple access points with multiple antennas are included in fig. 2 to increase coverage. It further would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the combination applied above the multiple access points with multiple antennas of Strong for increased coverage. Variation in cables, location and switching are well known in the art and therefore would have been obvious to the artisan in the

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combination.

6. Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grego (WO 02/096032), Kotola (US 6892052) and Strong (US 20030007473A1) as applied above and further in view of Korcharz (US 20040236967A1)

Power over Ethernet for the access point would have been obvious in view of Korcharz disclosing this in paragraph 0002 for advantages such as avoiding power cabling.

7. Claims 34-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grego (WO 02/096032), Kotola (US 6892052) and Lee US 20040039817 A1.

Grego discloses a mobile device (T) with network transceiver Bluetooth transceiver for communicating base station (access point) transceiver BTS and Bluetooth transceiver (BTB). The Bluetooth channel is used when the normal channel is unavailable. This allow traffic diversion. See the abstract and pages 7-8. Grego lacks RFID.

Kotola disclose an access point and mobile device and with network, Bluetooth and RFID transceivers. This allows connection with an access device using RFID. See cols. 1-4. The access point RFID transceiver 110/805 can communicate with

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RFID tag 215/803 on mobile device 102 to receive predetermined data such as Bluetooth ID or other stored data. The tag may be active to provide increased range and data rate in col. 4 line 61 - col. 5 line 5, but does not expressly disclose the "without interrogation" limitation.

Lee discloses access points that respond to a probe request by transmitting a probe response with an indication of channel loading to a wireless station. The wireless stations could then select a channel that is not busy. See the abstract and paragraphs 0006-0012

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in Grego the RFID of Kotola as an alternative or addition to cellular/Bluetooth to allow communication with a mobile terminal and access point using RFID. Alternatively it to have included in Kotola the channel switching based on availability or traffic load disclosed in Kotola for traffic diversion.

Regarding claims 34-38, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the combination applied above probe request and response of Lee to indicate a busy channel to provide the traffic diversion of Grego and suggested by Kotola disclosing that the invention applies to 802.11 WLAN and other standards.

Response to Arguments

8. Applicant's arguments with respect to claims 1-6 and 8-38 filed 8-17-06 have been considered but are not persuasive and/or moot in view of the new ground(s) of rejection.

Applicant's argument regarding independent claims 1, 13, 28, 34 and 38-39 are moot in view of the new grounds of rejection applied above. The argument that the RFID transceiver of Kotola is used to interrogate tags and not communicate with an access point is not persuasive because the access point RFID transceiver 110/805 can communicate with RFID tag 215/803 on mobile device 102 to receive predetermined data such as Bluetooth ID or other stored data. The argument that Grego and Kotola do not communicate with two access points at one time is not persuasive because it is not required by claim 13 and is not supported by applicant's paragraph 39. This paragraph discloses using a second access point when the first one is busy, but not using both access points at the same time.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tuttle (5914671) discloses a system with antenna switch and triangulation. Gorsuch (US 65260347) and Hamberg (US 20050113066A1) disclose

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with cellular transceiver and probe request. Bridgelall (US 20020126013A1) discloses a device with RFID transceiver and Bluetooth transceiver.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

CONTACT INFORMATION

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through

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Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact an Electronic Business Center (EBC) representatives at 703-305-3028 or toll free at 866-217-9197 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at ebc@uspto.gov. The Patent EBC is a complete customer service center that supports all Patent e-business products and service applications. Additional information is available on the Patent EBC Web site at <http://www.uspto.gov/ebc/index.html>.

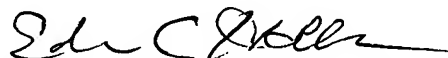
Any inquiry of a general nature should be directed to the Technology Center 2600 receptionist at (571) 272-2600.

Facsimile submissions may be sent via central fax number 571-273-8300 to customer service for entry by technical support staff. Questions related to the operation of the facsimile system should be directed to the Electronic Business Center at (866) 217-9197. On July 15, 2005, the Central FAX Number will change to.

CENTRALIZED DELIVERY POLICY: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number. Inquiries concerning only hours and location of the Customer Window may be directed to OIPE Customer Service at (703) 308-1202.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin C. Holloway, III whose telephone number is (703) 272-3058. The examiner can normally be reached on M-F (8:30:-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (571) 272 - 73087308.

EH
10/29/06


EDWIN C. HOLLOWAY, III
PRIMARY EXAMINER
ART UNIT 2612